

Performance Evaluation of Karnataka State University Library Resources and Services: A Librarians' Approach

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Abstract

Library service is the supreme activity to attract the attention of the user community. It is more so in the case of a university library. Looking at the commitment of the university library to promote the cause of healthy higher education, it is essential on the part of the library professionals to evaluate and assesses the usability of the library resources in the light of the vast amount of investment made in acquiring the information resources and the cost of the manpower in managing the library activity. This paper reveals one such attempt with reference to the university libraries in the state of Karnataka which is a part of Independent India.

Keywords : *Performance evaluation; University library; Library resources; Library services; Collection development*

Introduction

The university essentially an intellectual arena and a place for the cross-fertilization of ideas, where the boundaries of knowledge are being perpetually extended. In order to run the show of the university libraries, the adequacy of library staff equipped with skills are the basic requirements for the library along with proper timing, for easy access to the library users. It is imperative for the university library to collect the libraries reading materials with utmost care in meeting the nascent and multifarious needs of the faculty, research scholars and postgraduate students. The quality of collection has a direct bearing on qualitative service and user satisfaction. Thus, collection development not only helps in catering the needs, but to build a coherent and reliable collection over a number of years, to meet the objectives of the university library services. Collection development of library

materials includes both traditional paper based material and information technology based products like CD-ROMs.

Every library, whether it may be Public Library, College Library or University Library, provides basic library services to their users. Basic services includes enrollment of members, circulation of reading material, reading room facility, home lending service, inter-library service, document delivery service, consultation of catalogues/OPACs, etc. While providing these services, the role of the librarian is most crucial and important. His approach must be always of positive nature and of giving helping hand to the users. These basic services are discussed here in detail with the help of the data collected through the questionnaire administered to librarians and also the information collected from, annual reports and personally visiting these libraries.

2. General Profile of Karnataka

India is the seventh largest nation on the earth in terms of area, but the second largest in terms of population(after China). India consists of twenty-six federal states and seven union territories. Karnataka State, in which the current studies, was undertaken, with a total area of 191,791 sq. kms and a population of about 50 million. In terms of general development, the state is averagely represented in areas such as agriculture, education, health, industry, technology, etc. In terms of IT, the state is in the forefront and has become an active player in implementing and ensuring that its use and accessibility is felt in almost all aspects of life. The national IT policy has been adopted with few changes by the Karnataka State government and by those in industry due to the fact that its application leads to higher productivity. In many societies, this is seen as a key factor for economic strength in the present ever-competitive world. The state of Karnataka is also host to premier institutes like the Indian Institute of Science(IISc, 1911), Indian Institute of Management(IIM, 1973), NIMHANS(1993), and the Manipal Academy of Higher Education(1994), to name but a few, and to many IT related companies such as Infosys, Wipro, Informatics-India, etc. Above all, Karnataka State is called the Silicon Valley of India.

3. Need and Purpose of the Study

The University Grants Commission and State Governments are providing financial assistance to the University Libraries in India for building up collection of library, construction of library buildings, purchase of computers and other equipments required for supporting teaching and research activities in the universities and colleges. University Libraries are playing a vital role in providing library services to support research conducted in vari-

ous departments in the University. Questions are now a days raised whether university libraries are providing adequate library services to their users? Whether the readers are satisfied with these services? To find out answers to these fundamental questions it was thought necessary to evaluate in a systematic manner in all aspects of library services offered by the university libraries in Karnataka.

The Primary purpose of this study is to assist internal decision making and planning, including;

- * Assessing current levels of library services
- * Diagnosing particular problem areas or services
- * Monitoring progress toward specific objectives
- * Justifying internal resources allocation

4. Objectives of the Study

The following are the objectives of the study:

1. To provide a historical perspective with regards to collection development, infrastructure and services offered in the University Libraries of the State;
2. To evaluate the Librarians efficiency with reference to changing needs of the users;
3. To assess and measure the Librarians opinion on the resources and services keeping in view the adequacy and inadequacy of the respective libraries;
4. To examine the state of the art of library automation and networking with special reference to the possibility of participating whether systems and networks to promote the resource sharing.
5. To suggest the ways and means of using available facilities to get the adequate financial assistance from the different agencies;
6. To highlight the significance of campus networking for enabling the optimum utilization of Internet sources and services.

5. Methodology

The survey method is the best method to know the present situation of the topic of the study. Hence the survey has been undertaken with the help of questionnaires designed for this purpose. The questionnaire was designed as a mix of closed and open-ended type questions. A majority of the questions were structured with multiple choices to tick appropriate answers. Such questionnaire enhance the response as they are easy to fill-in, consume less time, and also facilitate efficient, objective and easy analysis of data, tabulations and scoring. In addition, in certain cases, interviews with the heads of libraries were conducted to collect the data. The first author visited

all the libraries and collected data for this purpose from variety of documents and in person. In addition, the Librarians and Library staff members of various section of the library viz., acquisition, technical, circulation, reference and IT based services etc., of these universities have been discussed.

In this study, the data from published sources and the raw data collected from the respondents through questionnaire survey, observation and interviews have been assessed and analyzed to find the results. In accordance with the procedures followed for qualitative research, the textual data has been analyzed by organizing the data. The data collected through questionnaires have been fed to computer, using SPSS(Software Package for Social Sciences) and the print outs were checked to rectify the typographical as well as other errors. Statistical analysis was made with the help of above said software used for presenting frequency distribution tables, graphs and other tables of variables to establish relationship between them.

6. Analysis and interpretation of the Data

General information:

It is a known fact that most of the university libraries in Karnataka have not filled in the post of Librarian though the posts are sanctioned. Three libraries (42.86%) reveal that they are headed by full time Librarians. Whereas 4(57.14%) libraries are headed by the Library in-charge. The data further shows that 3(42.86%) libraries are having qualified librarian with double masters degree and Ph.D. in Library Science and 3(42.86%) libraries are having professionals with Masters degree in Library Science and only one library having in-charge from other than library science subject. All most all the librarians are undergone special Information Technology based training at INSDOC, DRTC, NISSAT and INFLIBNET. The age of librarians of university libraries in Karnataka shows that 3(42.86%) librarians are of the age bellow 50 years, whereas 4(57.14%) librarians are above 50 years. At the same time a very interesting factor to note that male librarians are heading all the university libraries in Karnataka.

Departments, departmental libraries and PG centers:

Universities in Karnataka have number of departments to offer different courses and to conduct research activities. The data shows that University of Mysore is having highest number of PG departments(63), followed by Karnatak University. Indian Institute of Science library is having 42 departments and 42 departmental libraries it is help to the readers to access related and timely needed information with in the stipulated time.

Table 1 Distribution of University and Departments

Name of the University	No. of PG Departments	No. of Departmental Libraries	No. of PG Centers	No. of Constituent Colleges	No. of Affiliated Colleges
University of Mysore	63	12	4	4	260
Karnatak University	49	10	6	4	252
Bangalore University	40	4	2	3	402
Mangalore University	21	NIL	1	2	106
Gulbarga University	35	2	4	1	155
Kuvempu University	20	NIL	1	4	125
Indian Institute of Science (Deemed Uni.)	42	42	NA	NA	NA

7. Development of University Libraries in Karnataka

The development of university libraries over a period of time with respect to its establishment, working hours, library membership, staff strength and collection of library materials have been traced and presented in Table 2 showing development of university libraries and these facets have direct bearing on accomplishing assessment of university libraries of Karnataka.

Table 2 Development of University Libraries in Karnataka

Details	IISc.	MY	KU	BU	MU	GU	KUV
Year of Establishment	1909	1916	1950	1966	1980	1980	1986
Working Hours	08.00 to 11.00	08.00 to 09.00	08.00 to 09.00	09.30 to 07.30	08.00 to 09.00	08.00 to 08.00	08.00 to 08.00
Users							
Faculty	469	480	262	175	103	165	126
Research scholars	1083	320	260	165	63	215	45
Post-graduates	571	2100	1450	1300	1176	1125	1016
Library Staff							
Dy. librarians	vacant	3	I/C	2	1	2	vacant
Asst. librarians	6	5	5	vacant	8	8	4
Collection							
Books	162000	850000	363442	286828	103128	175000	53183
Journals (back volumes)	16800	120000	52632	38000	14835	25000	3004
Thesis/Dissertations	6000	10000	5989	5000	679	2500	132
IT Products							
A/V materials	280	250	120	86	48	26	NA
CD-ROMs	125	300	105	45	80	120	26

IISc. = Indian Institute of Science
 KU = Karnatak University
 MU = Mangalore University
 KUV = Kuvempu University

MY = University of Mysore
 BU = Bangalore University
 GU = Gulbarga University

Table 2 depicts that the development of University Libraries of Karnataka. Among the university libraries in Karnataka, Indian Institute of Science is the oldest university established in the year 1911, followed by University of Mysore(1916), while the Kuvempu University is the youngest university established in the year 1987. It is evident from the table that, IISc. library is the only library open from morning to till late evening(up to 11.00 p.m) to meet the user's accessibility for the library resources moving towards the maximum utility. While the other university libraries are on average, open during daytime for 12 hours. University of Mysore library has on edge over other university library as regards to total registered library members of about 3,800 followed by IISc., Karnatak University, Bangalroe University and the rest. The researcher observed that where he working as a Asst. Librarian at Karnatak University Library, Dharwad in the academic year 2001-2002, only 52% percent of the PG students, 28% of the Research Scholars and 89% of the Teachers are members of the university library. There has been a fall in the membership of the library during the last one decade; which suggest the need for special efforts to mobilize membership. Librarian and library staff is planning to better the situation.

Similarly the total library professional(Dy./Asst. Librarian) available in the respective university libraries are ranging from 2-8 professional staff with an average of 7 library professional staff in each university which is still less when it is compared with total collection and users strength of the library. The total Book collection of University of Mysore library is the highest while IISc. library clearly seeps its strength in Journal collection(168,000) and University of Mysore in thesis and Dissertation Collection(10,000). It is pathetic to find from the table that, the CD-ROM products, a major information storage and retrieval sources in the Networked environment, University of Myosre(300), IISc.(125), Gulbarga (120) and Karnatak University, Dharwad(105) are the libraries having CD-ROM technology products and also good number of A/V materials.

8. Library Statistics

The principal ways in which the libraries and information services have sought to manage the quality of the services is through monitoring the statistical measures and by through adoption of standards and nationally agreed guidelines. The basic statistics in the library operations, especially average number of readers visited daily; average number of documents issued and consulted daily and average number of quarries attended daily etc., have to be collected from each and every university library. The ideology behind the collection of this type of library statistics will reveal the strength and

weaknesses and showing the utilization or under utilization of information resources and competencies of library professionals.

Table 3 Library Statistics

Details	IISc.	MY	KU	BU	MU	GU	KUV
Average No. of users visit the library	500	500	450	300	380	300	250
In-house consulted	800	750	600	500	500	400	400
Home lending	400	350	300	180	200	200	200
Average No. of queries attended daily	100	50	30	50	100	50	NR
Average No. of photocopying exposures per day	3000	1000	600	400	1000	1000	300
No. of documents received on ILL(2002)	25	42	28	50	56	35	4
No. of documents issued on ILL(2002)	150	89	19	30	64	25	6

The library statistics of university libraries in Karnataka is presented in table 3. From the above table and figure, it is traced that, number of users visiting to the library ranging from 250-500, Indian Institute of Science and University of Mysore library stands first by an attendance of 500 users visiting daily followed by Karnatak University(450), Mangalore University(380), Bangalore(300) and Gulbarga(300). Similarly the total documents consulted daily in different university falls between 400-800 and IISc. library stands first (800) while Gulbarga(400) and Kuvempu university is the least(400). Indian Institute of Science library issues more number of documents every day(400), however the Bangalore university library issues only 180 documents a day. Indian Institute of Science and Mangalore University has a strong hold personalized Reference Services by attending 100 reference queries a day followed by University of Mysore(50), Bangalore (50), Gulbarga(50), Karnatak University(30) and Kuvempu University was not responded to this question.

Regarding the average photocopying exposures per day, the IISc. has a strong hold in photocopying services by highest exposures per day(3,000) followed by University of Mysore, Mangalore, and Gulbarga University (1000). Reason behind this the IISc. library has recognized as one of the UGC-INFBLINET's Document Delivery Centre in India. Further it is observed that the Mangalore University has received the highest documents(56) on Inter Library Loan basis followed by Bangalore(50) and University of Mysore(42) and the least is Kuvempu University(4). At the same time the number of documents sent on ILL to other universities, the IISc. library is in the forefront by sending 150 documents to different universities in India and some extent to abroad also.

9. Infrastructure Facilities

Infrastructure facilities of any library play an important role in service providing. Among them the library building is one. The planning of the university library building should be based and governed by the five laws of library science. The library is kept open almost throughout the year and throughout the day. It is the one building which open to the library users when all other department buildings are closed. In these circumstance the library infrastructure facilities should be strong enough and conducive to the user community who provide qualitative services, the university libraries must have the basic facilities like community/lecture hall, research cabins, display hall, lighting/heating, toilet, library furniture and provision of suggestion boxes etc.

Besides, this the information technology based library facilities should also earmarked to the users for efficient and effective library services which includes viz., photocopier, Telex/fax, computer. Online catalogue(OPAC), Internet and CD-ROM facilities in the university libraries; without these, attaining quality goals of the university libraries remains unreality.

Table 4 Library Facilities

Library Facilities	IISc.	MY	KU	BU	MU	GU	KUV	%
General and Basic Facilities:								
Community/Seminar hall	Yes	Yes	No	No	No	Yes	Yes	57.1
Telephone/Intercom	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Generator	No	Yes	No	Yes	Yes	Yes	No	57.1
Research cubical	No	Yes	Yes	No	Yes	Yes	No	57.1
Cooling/heating	No	Yes	Yes	No	Yes	Yes	No	57.1
News paper / Magazine Section	No	Yes	No	Yes	Yes	Yes	No	57.1
Telex / Fax	No	Yes	No	No	Yes	Yes	Yes	57.1
Browsing/Display hall	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Microfilm/Microfiche reader	No	No	No	No	No	No	No	100
Suggestion/Complain box	No	No	No	No	No	No	No	100
Toilets	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
IT Facilities:								
Computers for library automation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Library software	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Scanner/Desktop publishing	Yes	Yes	Yes	No	Yes	No	No	57.1
A.V. systems	Yes	Yes	No	Yes	Yes	No	No	57.1
Networking Facilities:								
National	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
International	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100

The Table No. 8 shows that the university library infrastructure facilities both traditional and modern information technology gadgets available in the

university libraries of Karnataka. All the university libraries are having the infrastructure facilities of telephone, photocopier, browsing/display hall, computers for library automation, library software, networking facilities both national and international amounting(100%), followed by community/seminar hall, generator, research cabins, cooling/heating, news paper/magazine section and telex/fax, scanner/desktop publishing, A.V. systems(57.14%). All the university libraries are expressed the non-availability of microfilm/microfiche reader, suggestion/complain boxes.

10. University Library Service

The nature and efficiency of the information services provided by the university libraries varies from one to another, owing to the whole range of interest of their user community. However, with the emergence of computer and communication technology have made it possible to provide a varieties of technology based information services over a wide range of interests, which were not possible earlier. It's wrong to assume that some of the services are important while the others are less important. As a matter of fact, all these activities and services are interdependent, interrelated and directed towards common goal of university library systems.

By providing the information services to the users community the university library is able to fulfill its aims and objectives for the promotion of advanced learning and research. Extending the active library services by the university library to the users community is a very fundamental in attaining the quality in university library service systems. Some of the basic library services of any universities are compilation of bibliographies, reference and referral, CAS, SDI, photocopying, ILL etc. It is the university library to capture and store information and to then make that information accessible in an accurate and cost effective form without loss of time of the users. These goals can be accomplished by providing technological based services like OPAC, CD-ROM and Internet etc.

The services offered by university libraries in Karnataka can be traced vide Table 5. All most all the university libraries are providing Library and information services to the users community mainly Circulation, Reading Hall, Reference, Referral, Periodical, ILL, UEP, Bibliographical, CAS, Photocopying, E-mail, access Other Library Network, Downloading Software, and Internet (100%). Followed by SDI, OPAC, LAN, Document Delivery service(71.4%), whereas Indexing, Abstracting, Bulletin Board, e-journals, Web-OPAC(28.6%) and Tele-facsimile service is only 14.3 percent. But no library offered some of the services like Microfilm/Microfiche Reader Service and Translation services to the users.

Table 5 Library and Information Services

Library and Information Services	IISc	MY	KU	BU	MU	GU	KUV	%
Basic Services:								
Circulation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Reading hall	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Reference	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Referral	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Periodical	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
ILL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
User education	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Information Services:								
Bibliographical	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
CAS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
SDI	Yes	Yes	No	Yes	Yes	No	Yes	71.4
Photocopying	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
OPAC	Yes	Yes	Yes	No	Yes	No	Yes	71.4
Indexing	Yes	Yes	No	No	No	No	No	28.6
Abstracting	Yes	Yes	No	No	No	No	No	28.6
Translation	No	No	No	No	No	No	No	No
Microfilm reading	No	No	No	No	No	No	No	No
Networked Based Services:								
LAN	Yes	No	Yes	No	Yes	Yes	Yes	71.4
WAN	No	No	No	No	No	No	No	No
Internet Based Services:								
E-mail	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Tele-fascimale	No	Yes	No	No	No	No	No	14.3
Web-based OPAC	Yes	No	Yes	No	No	No	No	28.6
Bulletin board	Yes	Yes	No	No	No	No	No	28.6
E-journals	Yes	Yes	No	No	No	No	No	28.6
Document delivery	Yes	Yes	Yes	Yes	Yes	No	No	28.6
Access other library network	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Special interested group	No	No	No	No	No	No	No	No
Downloading software	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
Current events/news	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100

11. Use of Information Technology

University libraries are now part of a global and competitive environment, and experiencing tightening budgets, increasingly demanding end-user expectations and the ongoing demand from our founders to do more with less. University libraries need regular and active users to justify the increasing investment in learning resources, scholarly journals, technology and associated infrastructure that enables access to electronic materials. The university libraries in Karnataka is no longer the primary sources of information for many users. Information is now a commodity, available via the Internet, from other libraries, national and international centers — at a time,

and in a format that suits the users. The provision of many university libraries developed, student-centered learning materials via Electronic Sources. With this background some of the factors identified for the use of Information Technology in university libraries in Karnataka.

Table 6 Use of Information Technology

1.Strongly agree 2.Agree 3.Uncertain 4.Disagree 5.Strongly disagree

Sl. No	Statements	Mean	SD	CV
1.	Creation of library records in machine readable form is pre-requisite for library automation	1	0.38	33.07
2.	Library should have required infrastructure for IT applications	1	0.38	33.07
3.	Library should have trained manpower for all IT applications	1	0.38	33.07
4.	Library should automate all its library housekeeping functions	1	0.38	33.07
5.	Enhance the staff skills in using the IT	1	0.38	33.07
6.	Training of end users in the use of IT tools	1	0.38	33.07
7.	Use uniform standards for database creation	1	0.38	33.07
8.	Use uniform software for its automated functions	2	1.41	70.71
9.	Provide online OPAC access to library users	1	0.49	37.97
10.	Provide access to other library catalogues (National and International)	3	1.27	49.48
11.	Provide access to CD-ROM databases through campus network	3	1.27	49.48
12.	Provide Document Delivery Service	2	0.53	34.02
13.	Provide Access to learned journals in digital form	2	1.25	54.84
14.	Create and provide access to library web (home) page	2	1.25	65.42
15.	Create demand for online access to other databases	1	0.53	37.42
16.	Provide electronic bulletin board service	2	1.27	52.39
17.	Digitization of unique materials in the libraries for sharing and improving access to intellectual resources	2	1.11	48.68
18.	In a changing role, Library staff should help users to identify, locate, acquire or access, and learn how to use online databases themselves	1	0.49	37.95
19.	Scan journal articles and provide article indexing	1	0.53	37.42
20.	Required to purchase more and more resources in electronic format as well as provide access to information stored remotely	2	1.11	48.68
22.	Establish Electronic subject discussion forum for all the subjects through INFLIBNET and other library networks	2	0.49	28.46
23.	Campus networking required for connecting all the department to library	1	0.69	37.16
24.	Provide appropriate linkages from item in the catalogue to a full text of a document on the network	2	0.53	37.42
25.	Library must participate in national and regional cooperative efforts for sharing resources, expertise and experience	2	0.95	41.61
26.	Library should have high speed data network connectivity	1	0.49	37.95

Many of the factors had given for evaluation of use of Information Technology to provide one point solution to the users. These factors are rated in 5 point scale(Strongly Agree to Strongly Disagree) and average

Mean, has been computed for each question followed by Standard Deviation(SD) and CV also calculated and presented in the table.

The table 6 reveals that the evaluation of the use of information technology through many factors is possible. These factors rated at 5 point scale(Strongly agree to strongly disagree). The Mean, Standards Deviation(SD) and Coefficient of Variation(CV) are calculated to study the concentration and dispersion of respondents opinion. The highest percentage(52%) of questions have given the Mean value equal to 1, which means 52 percent of questions answered by the respondents about the use of information technology is strongly agreeable and about 40% of questions Mean value is equal to 2. The 40 percent of the total number of questions have the opinion that information technology is agreeable but only a few questions(8%) answered by the respondents are uncertain. This tells us the use of IT is very much essential.

The Coefficient of Variation(CV) computers in the above table gives consistency and variability of opinion of librarians. It is observed that coefficient of variation for question No. 22 is least(28.40%), most of the librarians have answered to the question establish electronic subject discussion forum for all the subjects through INFLIBNET and other library networks uniformly and consistently. The questions 1 to 7 give the CV=33.07% which is next least co-efficient of variation in the above table and there is variable opinion about use of uniform software for library automation(CV =70.71 %).

12. Findings and Suggestions

The present study has evaluated the services and facilities offered by university libraries of Karnataka. Some of the important findings and suggestions are made here to improve the facilities and services.

Findings of the study

1. The universities in Karnataka have varying number of courses of study, and related facilities for conducting research activities. It is found that the University of Mysore has 63 departments of studies in different faculties which is the highest among all universities whereas Kuvempu University has 20 departments which is numerically the least among the others. This is due to the fact that the University of Mysore is the oldest among the universities in Karnataka.

2. It is found that out of the 7 sanctioned posts of university librarians only 3 have full time librarians. In some cases the post of a university librarian has been vacant for a considerable length of time. This has affected the overall management and administration of the library, and libraries have an

uneven developmental scale.

3. It is revealed from the analysis that no university library has made an attempt to enroll all the students and teachers of the university as their members.

4. The existing staff strength, both professional and others is highly inadequate compared to the magnitude of the work. The staff strength has depleted drastically as the vacancies fallen due to retirement of staff in particular have not been filled. For example the overall professionally qualified staff in all university libraries ranges from 2 to 10 professionals with an average of 7 per library. This has come down to 2-3 and there are non-professional staffs to head some of the essential services like reference service or looking after user services and so on.

The findings 2 and 3 mentioned above have considerably affected the overall functions and services of the university libraries in Karnataka in particular. This situation is also seen in the entire country and thus serious lacunae has been found in all university libraries in the country as a whole. Contextually this has concurrently affected all the services offered to the readers in universities and thereby the library use habits in general.

5. It is observed that the number of reading materials consulted within the premises is more than those borrowed. Loose issues of periodicals are issued only to the faculty members.

6. It is observed that all the seven universities in Karnataka are providing the traditional library services like, lending, reading and reference, acquisition of primary periodicals, procurement of books on inter-library loan as and when requested by the readers and so on. The microform collection once used as an alternative to print media is now gradually being replaced with electronic forms of documents. Hence the demand for the former media has almost been non-existent whereas the demand for the latter is gradually increasing. The translation service was once in great demand and it is now seldom or never sought. The other services are made available only on demand. However, internet based services like e-mail, accessing other library networks, downloading articles, academic and course related software are being sought by a large number of users of the libraries. Several other network based services are also being made available or being provided by only in one or two universities libraries.

7. The analysis of data on the availability of IT facilities in all university libraries reveals that most of the libraries have extensively computerized their operations and this has been developed progressively during the last five years. From the point of the rating of these facilities it is found that 71.42% have answered them as good. The infrastructure includes an ade-

quate number of computers with facilities for, CD-ROMs, printers, scanner and other peripheral devices.

8. The analysis of the data on the use of IT by libraries reveals that an evaluation of IT applications in libraries is possible. It is found that 52% of the statements asked about the use of IT in library are strongly agreeable, 40% of the statements are agreeable with the good use of the IT facilities in the library. Further only 8% of the statements are of uncertain nature. This finding implies that IT has essentially played its role in providing quality library and information services and products are concerned.

9. It is revealed that both traditional and modern infrastructure is available at all university libraries to a large extent. Basic facilities, IT facilities and networking facilities are moderately made available.

10. The number of seats to be provided for in-house reading and reference had been standardized years ago. According to these standards it is found that the seating capacity in many university libraries has been adequate. However, where there were lacunas in this context that is found in three libraries, regarding inadequacy of seats, the libraries now have taken steps to improve the situation. As a matter of fact some of them have a proposal on the anvil for the construction of additional reading halls.

Suggestions:

1. The present study has seriously considered the lack of manpower as the main cause for the decline in the quality of library and information services. Hence, it urges the state government to lift the ban on appointment of the university library staff and the librarian, as a special consideration and as essential service staff.

2. Authorities think that anybody who is studying for a course will be using the library for his/her academic requirements. However, it is really startling to know that not all the students enroll for the library membership on account of many factors. Either they depend upon some other library for their needs or they are not aware of their library services. If the library fails to attract substantial number of students studying then the money spent on its resources will not be justified. Hence, it is necessary for each university library to start a membership drive with innovative ideas. Students need to be convinced about the quality and usefulness of its services. This can be achieved by designing awareness programmes like bringing out informative Brochures, Orientation Programmes, and signboards at prominent places.

3. Libraries must realize the importance of routing all the queries through a single window. Information Desk or Reference Desk is very practical idea which is working efficiently, but only where it has an adequate

staff. Personal visits have revealed that most libraries do not have the professionally trained staff to man this desk. Libraries should take this with utmost care and deploy competent staff to address reference queries. The quality of reference desk enhances the library image as a courteous and cooperative support service of the University.

4. It is appreciable that most of the libraries have a good infrastructure as far as providing traditional library services like circulation, in-house reading and reference services are concerned. However, the same cannot be said about computer-based services. They are still limited rudimentary services like providing e-mail and Internet services. They must go a step further and provide services like online databases, networked CD-ROM database services, access to e-journals, online indexing/abstracting databases, etc. Libraries should invest in developing library web pages and provide services like Web-OPAC, access to digital resources of library through it. Many of the transactions like renewal, reservation of documents should be carried out from web page. With the ambitious projects like UGC-Infonet, libraries should develop the mindset to upgrade existing computer based services.

5. In the present networked environment all the university libraries should convert their bibliographical details into a digital form for strengthening the networking among the universities.

6. Librarians should strive for creating awareness among the users about on-line, Internet, CD-ROM Databases and other advanced services offered by the library as well as National and International Organizations.

7. With regard to photocopying services it is strongly suggested that coin operated photocopying machines may be installed to operate the self-service to cut down the time lag.

8. Library operations and services must be computerized on priority basis. Existing staff members may be trained to work in such an environment. If necessary, they may be exposed to new tools and techniques through in-service training programmes.

13. Conclusion

The nature and efficiency of the information services provided by the university libraries vary from one another, owing to a whole range of interests of the user community. However, with the emergence of the computer and revolutionary changes in communication technology, it has become possible for a university library to provide a variety of technology based information services to the users with a wide range of interests, which was not possible earlier. It is wrong to assume that some of these services are more important while the others are less important. As a matter of fact all these

activities and services are interdependent, interrelated and directed towards maximization of the usefulness of the university library system.

By providing information services to the user community the university library is able to fulfill its aims and objectives with regard to the promotion of advanced learning and research. Extending the active library services by the university library to the user community is a very fundamental factor in attaining the quality in university library service systems. Some of the basic library services of a university are compilation of bibliographies, reference and referral, CAS, SDI, photocopying, ILL, etc. It is an important function of a university library to capture and store information and then to make that information accessible to the users in an accurate and cost effective way without involving loss of time of the users. These goals can be accomplished by providing technology-based services like OPAC, CD-ROM and Internet etc.

An increasing rate of innovation and a rapid development in information technology induce a remarkable change in job qualification and substantial transformation of library structure. Today university libraries face an era of turbulent change, the sources of which are varied, with some effort, librarians learnt to cope up with the problems that followed along a reasonable predictable course. A greater challenge so far is to cope with a high-speed change subject to frequent alternations in directions. Unless librarians learnt to manage dramatic change it is not possible for them to survive in today's competitive and networked environment.

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